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# Course Redevelopment using an Authentic Design Studio Model Restructuration de cours au moyen d'un authentique modèle de studio de design

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# **Abstract**

Educational Technology and Design 879 is a graduate course that introduces students to the basics of video design and production. In an attempt to improve the learning experience for students a redesign of the course was implemented for the summer of 2011 that incorporated an authentic design studio model. The design studio approach is based on the idea of working and learning in a shared space. Offering a course that employs a studio design model provides the opportunity for exchanging ideas, sharing artifacts, and developing community more deeply and more quickly. What makes this course offering different is the combination of authentic tasks incorporating both online and face-to-face design studio environments. This paper will describe how a studio design approach combined with an authentic learning design was implemented and what was learned.

### Résumé

Educational Technology and Design 879 est un cours d'études supérieures initiant les étudiants aux rudiments de la conception et de la production vidéo. Pour améliorer l'expérience d'apprentissage, une refonte du cours a été entreprise à l'été 2011 en intégrant un authentique modèle de studio de design. L'approche « studio de design » repose sur l'idée d'un travail et d'un apprentissage réalisés dans un espace partagé. Un cours utilisant un modèle de studio de design offre la possibilité d'échanger des idées, de partager des artefacts et de développer une communauté plus en profondeur et plus rapidement. Ce qui rend ce cours unique est la combinaison de tâches authentiques qui incorporent des environnements de studio de design à la fois en ligne et en face à face. Cet article décrit comment une approche « studio de design » combinée à une conception d'apprentissage authentique a été mise en œuvre et ce qu'on en a appris.

# Introduction

The Educational Technology and Design (ETAD) program offered from the University of Saskatchewan is based on the concept of applying design in all aspects of its programming. ETAD 879, 'Advanced Video Design for Learning', is a graduate level course that introduces students to the basics of video design and production. For more than 20 years this course has been offered face-to-face on campus. In the last two years attempts have been made to improve the student learning experience in the course through changing the course design, scheduling and locations. Course content has been moved online and the number of weekly face-to-face sessions has been reduced. These changes are partly a response to ETAD program goals of offering more flexibility in scheduling courses for students and reducing their required in-classroom time.

In the summer of 2011 the course used a model that incorporated a design studio approach in both virtual and face-to-face learning spaces. The design studio approach is based on the idea of working and learning in a shared space where students work on similar tasks independently or in groups (Clinton & Rieber, 2010). This particular design studio also incorporated the idea that working and learning in a shared space could occur virtually, as well as face-to-face (Brown, 2005; Greenberg, 2009). The course represented an authentic opportunity for students to learn video production skills and apply these skills by creating learning artifacts for public performance (Wilson, 2010). The course began in May with two weekend face-to-face studios, followed by independent online work in June, a face-to-face design studio learning week at Emma Lake Kenderdine Campus (ELKC) in July and finished with a public performance of all the students' final projects at the end of August. The virtual design studio of the course used the Blackboard learning management system, where students were required to maintain a blog to share their assignments and monitor the progress of their classmates. The online work was generated by course assignments which asked the students to complete a critique of an existing educational program, create a 33 shot camera assignment, write a project treatment, develop a video script and produce a high quality project video, which served as the major artifact of the course. The artifacts of learning were shared with and critiqued by the instructor, and reflectively by the individuals who created them. The course was also built on the premise that an artifact may represent the creation of an actual product or it can represent a process or an individual's understanding of a process (Norman, 1991). The face-to-face design studio locations of the course were the College of Education at the University of Saskatchewan and the ELKC located on the shore of a northern lake in Saskatchewan, Canada. The students enrolled in the 2011 offering consisted of eleven Masters of Education graduate students who were classroom teachers, or school division consultants. This case study will describe the theory behind the course re-design and share the results of the process and outcomes of the course with the intent of promoting more design studio courses in the area of video production.

# **Theoretical Approach**

The ETAD program is focused on design, which creates an underlying pressure on instructors to be continually reflecting on the design and delivery of the courses that make up the program. It is the instructor's belief that course design innovation and change can result from evolution but a theoretically informed approach is usually a better method of change. Previous iterations of this course have evolved informally to incorporate authentic assignments, increased sharing and more interaction during the learning and production process. A review of the literature was undertaken

to find existing course design models that might be applied to 'firm up' the evolution of the course and make the learning even more beneficial for students. After an analysis of the existing course, program goals and a review of current design literature two areas of focus were chosen for the redesign of the course: students can be successful if they share their ideas and creations as a part of a design studio learning environment, and students learn skills thoroughly by working on authentic projects. These premises were chosen based on the fit with the existing course. There are other models that may work just as well but they were not chosen for this particular redesign.

# Design studio learning environment

Many areas of study have benefitted from the design studio approach (Cennamo & Brandt, 2012). Offering a course that employs a studio design provides the opportunity for exchanging ideas, sharing artifacts, and developing community deeply and quickly (Clinton & Rieber, 2005). Although very common and highly successful in fields such as multimedia design (Clinton & Rieber, 2010), architecture (Reimer & Douglas, 2003), art (Willems, 2009), and computer science (Greenberg, 2009) no evidence of the design studio model being applied to pure courses on video design could be found. Despite not finding a direct connection, reviewed research supported the belief of the instructor that similar positive experiences found in other design studio courses could be replicated in ETAD 879. In their research, Clinton & Rieber (2005) do an excellent job of demonstrating longitudinally the success of a studio model in graduate level courses on design. Their decade of positive findings was a key factor in applying the model to ETAD 879.

Basing the course on a studio model was supported by the belief that working in close proximity, and sharing the experience with other learners can make learning more effective than working without sharing or in isolation. According to McGuire and Banerjee (2008) there are three main benefits in utilizing a studio design learning environment:

- 1. Instruction in the studio is inherently visual, tactile, and verbal.
- 2. Instruction in the studio is dominated by one-on-one interactions: instructors are compelled to customize the content and delivery of instruction for each student.
- 3. Instruction in the studio is more social than other settings: students learn as much or more from each other as they do from instructors. (p. 1)

To this list of benefits, McGuire and Banerjee add that studio critique and learning is continuous rather than solely based on evaluation of products at key stages or upon completion. The visual nature of video content and the need to learn hands-on skills fit well with McGuire and Banerjee's understanding. The aspect of critique is a key component from studio models used in art instruction as a means of giving feedback (Barrett, 2000). The feedback in ETAD 879 was a less critical form of feedback than that applied in the traditional art studio model

Brown (2005) saw studio-based learning as being a positive and collaborative way of learning. In a studio-learning environment every student witnesses the processes that other students are using. The other students "not only get to hear each other's critiques, but because they were in some sense peripheral participants in the evolution of each other's work, they understand the thinking behind it" (p. 5). As a result of the critique process students in these courses have the

opportunity to develop an understanding of the decisions, issues, and the compromises that may influence the final product. Brown also believes that as a result, critique holds greater significance and presents learning opportunities for all of the students. Not only does Brown regard studio time as effective for delving more deeply and sharing more openly with others it also gives opportunities to put ideas into practice. In studios students are able

to pick up skills from each other...they witness the wide variety of ways to approach a design problem in the first place and how they start to appreciate and learn from the struggles, the missteps, and the successes of their peers. (p. 6)

Snyder, Heckman and Scialdone (2009) suggest that bringing learners into a studio setting allows them to mix technical skills with artistic skills. Learners go beyond simply mastering the technical aspects of a task to add creativity to their skill set. A studio environment allows for the combination of production, performance, interpretation and critique. They believe that a "studio provides students with a safe environment to develop creative practice" (p. 1926). They also put forward the idea of incubation where students are brought together in a location that has course content as the central focus. In a studio environment the level of distraction is reduced, and combined with openness and collegiality students learn effectively from one another. Learning from one another was as the heart of the studio experience in ETAD 879. The virtual and face-toface design studios fostered the creation a learning community as well as a safe supportive environment for the students. In Magee's (2011) study of two classrooms she identified a similar improvement in student usage of technology. The arts-based studios she studied blended both technology and art to offer hands-on active learning. These models depict a studio in which technology, hands-on arts-based learning, and caring are brought together to create a holistic learning environment. She described many advantages for learning in this type of setting. Three of the outcomes she identified were embedded in the design of ETAD 879 specifically, improving technology skills, creating a caring peer environment and providing embedded ongoing assessment.

Part of the studio approach was also the attempt to create a learning community. According to Schwier (2011) a successful learning community allows learners and educators to facilitate formal and informal connections with a wider variety of participants in the course and beyond. This approach allows the development of "relationships with other learners and educators outside the traditional boundaries of the school. With technology, virtual learning communities can be built using both synchronous and asynchronous communications media while the group learns from the construction process itself" (Kowch & Schwier, 1998, p. 2). The studio design approach also finds support from Wenger (2007) and draws on the characteristics of communities of practice. According to Wenger, three elements are crucial in distinguishing a community of practice from other groups and communities. A community of practice is more than just a collection of individuals:

It has an identity defined by a shared domain of interest. Membership therefore implies a commitment to the domain, and therefore a shared competence that distinguishes members from other people" ... In pursuing their interest in their domain, members engage in joint activities and discussions, help each other, and share information. They build relationships that enable them to learn from each other" ... They develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems—in short a shared practice. This takes time and sustained interaction. (p. 1)

Focused efforts were made to build the above-mentioned factors of a successful community into ETAD 879. A very specific domain, video design, was the main content of the course. Although none of the students had much previous experience in the subject material all were very interested in developing their skills and identified the potential professional application of the content. Joint activities were scheduled during the initial skill building workshops to bring learners together to work through the material in a collegial manner. Through the creation and critique of artifacts, shared knowledge and understanding resulted. The ability to use blogs as an online studio meant that sustained interaction took place. Also the course stretched out over four months instead of a traditional six weeks in the summer session. This extended contact helped to develop the foundations of a community of practice.

McDermott (1999) further supports the conditions that foster a community of practice when he shares his thoughts that effective learning occurs when there is a defined relationship between people. He states,

...learning is in the relationships between people. Learning is in the conditions that bring people together and organize a point of contact that allows for particular pieces of information to take on a relevance; without the points of contact, without the system of relevancies, there is not learning, and there is little memory. Learning does not belong to individual persons, but to the various conversations of which they are a part. (p. 17)

Following McDermott's advice, an important goal of the course was to create a learning space where students could create relationships around the craft and skill set of video making. Each student was required to maintain his or her own publicly accessible online space and also utilize the private discussion area of the course as a place to meet and share. When the students were in face-to-face sessions the learning space was the classroom at the University of Saskatchewan or the studio at the Emma Lake Kenderdine Campus.

# Authentic learning

An authentic learning model (Wilson & Schwier, 2009) served as the second theoretical foundation for the course design. This model consists of five constructs each of which contributes in a specific way to a students' ability to experience authentic learning. They are problem-based learning, authentic assessment, project management, scaffolding and social agency. The constructs combine to give the course a strong educational foundation, and inform the design of student experiences in ways that are classified as 'authentic learning.' By definition, authentic learning must be personally relevant and connected to the real world (Stein, Issacs, & Andrews, 2004), emphasizing something Brown, Collins and Duguid (1989) refer to as "the ordinary practices of the culture" (p. 34). Tochon (2000) synthesized many of the views of authentic learning in to the following statement: "Authentic classroom practice... reflects, for the students, a combination of personal meaning and purposefulness within an appropriate social and disciplinary framework" (p. 332). Creating a successful authentic learning experience requires a mix of theoretical and practical learning environments.

It is important to have an understanding of the five pillars of the Wilson and Schwier (2009) authentic learning model. Problem-based learning (PBL) is an "instructional learner-centered approach that empowers learners to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a problem" (Savery, 2006, p. 12). Students

using PBL learn through collaboration and reflection (Hmelo-Silver & Barrows, 2008), and generate collective knowledge by means of social discourse. Another important aspect of problem-based learning is authentic assessment. Authentic assessment requires students to apply competencies or combinations of knowledge, skills, and attitudes that are applied in professional life (Gulikers, Bastiaens & Kirschner, 2004). Students are "required to use prior knowledge, recent learning and relevant skills to solve realistic complex problems" (DiMartino & Castaneda, 2007, p. 2). The curriculum focus shifts from teacher to student (Candela, Dalley & Benzel-Lindley, 2006). A greater emphasis on student independence reduces but does not eliminate the use of scaffolding. In this model the responsibility and the control of the learning is placed on the student; however, they are never left to fend for themselves (Greening, 1998). As the project progresses, and learners develop confidence, the instructor fades and more of the learning process is handed over directly to the students. Wenger's (1998) peripheral learning model provides the framework to introduce the learner to the actual community without pressure to become a full-fledged participant right away. Understanding how a community works and how one can contribute to that community is a feature central to education. The concept of social justice is being used more often in education but it is not easily defined (North, 2008; Sensoy & DiAngelo, 2009). Although essential, it will take time for learners to fully appreciate the social implications of their work.

The elements of the authentic learning model fit well with the course. In ETAD 879 each member initially choses their own projects with a loosely defined plan for completion. The students were responsible for all aspects of their projects such as creating scripts, props, storyboards, video and audio clips, scheduling and editing. Students were able to put their thoughts, ideas and creations into the public domain for feedback from the instructor and other students making the assessment very authentic. Herington and Oliver (2000) stated that to have an authentic learning experience portions of the learning have to be situated in an authentic environment. Painters, sculptors and other artists have long used the ELKC as a location to work, share and learn from what others are doing. The 2011 offering marked the first time the design studio approach had been used as the basis for ETAD 879 and an artistic venue was employed. The course design intentionally scaffolded the learning experiences that lead to a variety of successes for the learners. They were able to work independently until they faced a challenge they could not overcome. The instructor would provide assistance once this roadblock was reached. Many of the projects were done pro-bono for organizations that were unable to afford high quality productions addressing the issue of social agency.

# **Methods of Analyzing Student Success**

To gauge the success of the course redesign a variety of data collection methods were employed. Data was collected in the form of written observations of face-to-face sessions, online interaction between students, and interaction between student and instructor. Each student received continuous critique from the instructor and varying levels of feedback from the other students on their work. Throughout the course the students generated evidence of their learning in the form of online artifacts, which were also studied. At the end of the week of authentic studio learning at the ELKC, students were asked to reflect and share how they felt about the experience. The intent of the post face-to-face studio reflection was to go beyond a traditional course evaluation and to have each student reflect on how the experience compared to other courses they had taken. Requesting feedback while the experience was still fresh in the minds of participants

would help to determine if the intended elements of the studio model were evident in their learning journey. As the face-to-face studio marked the last major course event before the final project sharing, and many of the projects were completed during this time, it was deemed to be an appropriate time to solicit feedback from the participants.

To guide the reflection process students were asked to begin by responding to the following set of questions:

Describe what the studio experience has been like for you?

What would you have changed about the course?

This course tries to focus on authentic learning conditions, in your opinion was this goal met? If yes, in what ways.

Has working at ELKC been an effective way to learn?

Students were also given the opportunity to add their own comments to explain what the experience meant to them.

A comparison of grades from the last three years of the course was conducted to attempt to quantify any changes in student performance. A final survey was administered after the presentation of the final projects as well.

# **Feedback**

After compiling and reviewing the data a number of themes emerged. Observational data from the face-to-face sessions was, for the most part, positive. Students quickly formed groups and set to work on solving problems and addressing performance tasks. There were many examples of laughter in the sessions and especially at the ELKC. Sharing of thoughts and ideas was constantly taking place during directed learning time, group work and during breaks. A spirit of open and honest communication could also be observed and conversations focused on the course material not on external topics. Each face-to-face session was marked by shared experiences, questions and long days spent together forging connections. All students successfully completed the required assignments and the course had an average grade of 89%. The overall quality of the assignments and projects was higher. Average grades were 7% - 10% higher than the previous two offerings of the course using the same assessment rubric.

The online studio environment was successful. The instructor was able to monitor the progress of, and provide feedback to, each student. When a question or problem arose, a record of what they had completed could be accessed to inform the scaffolding process. Questions were unpacked and techniques discovered based on the work of the other students. A record of individual student development was on display and was used to assess individual progress towards reaching course objectives. These individual roadmaps were combined with reflective data from the students to assess the success of the studio design model. There were comments from students on everyone's online studio blog but the frequencies were not as high as was hoped. The cumulative comment totals by the students were not more than those posted by the instructor. Frequencies of views showed that students were looking at each other's content but it was not known specifically what they were taking away from these views.

The survey data provided a number of concrete examples of the positive sense the students had about the course. The most significant observation and feeling shared by the students was that the course provided an excellent learning environment and experience:

I loved the openness of the course. I was motivated to create a final product and I found myself doing hours of research that was meaningful and relevant - much appreciated the 'just in time' learning approach.

This course was a great learning experience, it is was one of the most useful and practical courses I have taken at the graduate level.

The support from the other students during the face-to-face and virtual studios was valued. It made the learning experience much richer and allowed the students to move beyond simply completing a task. They were able to understand the entire process. A key for the participants was having others present and accessible for helping and sharing.

The experience made me reflect on how I learn and the authentic, "real world" context of our videos provided a chance to apply skills.

I could have learned these same skills in a different learning environment, but the fact that others were there to guide, to model, to support, is what really made this experience most rewarding. Learning those skills in isolation would have been more time consuming and far less rewarding!

... the support of the class in the room provided immediate feedback and at times stress relief. I felt that the set up of all persons being in the same room was extremely beneficial to me and it was a collaborative and constructive way to learn.

it was an environment where one could get immediate feedback and build from that feedback within a short period of time.

Students felt it was helpful to initially meet the other students and begin developing a community when the class started. Face-to-face meeting observations showed community construction starting as soon as the students began the course, before they were drawn into the design studio environment. Students mentioned that they found it helpful to bring the personal connections they had made in the initial meetings into the online environment. Even though the actual class meeting time was not frequent in the beginning it was helpful that most of the students moved through the assignments at roughly the same pace. Participants said that if all learners were at different stages of development they might not have been able to share as much of the experience. Students at similar stages of development could partner together or learn from those who had just been through the process.

I think for me it was not so much about learning new material, but developing community.

Most class members already have met, briefly at least, and most generally have their projects underway. The following days are completely self guided (in pace and direction) with phenomenal supports in place, and are fully within an "authentic learning model".

...it is most effective for well rounded learning. Each member must engage fully in their own learning and the collegiality that I have seen is almost unparalleled.

The design studio approach worked in a virtual format but these examples showed how powerful the result could be when the learners are also able to work in the same physical location.

All students were working towards similar goals and are able to assist each other in a number of ways. Often simple conversations take projects in a new direction and ultimately the project and student benefit from this interaction

Being in the same physical space did make it feel a little bit different than a wiki or googledoc for sure. Again, I have discovered that I thrive with F2F situations a little bit more than purely online ones

Attendees build personal and professional relationships, which carry on after the completion of the class.

The creation and sharing of artifacts truly benefitted the students. As each student progressed through the assignments others could see what their colleagues were completing and compare the results to their own. There was a heavy emphasis on practical authentic work with the key artifact being the final video that expressed a student's idea or plan. The final project artifacts were well done and well received by the audience of peers, actors and family members.

An unexpected yet popular outcome was a student-created artifact on the blackboards on the walls of the portable classroom that served as the studio at the ELKC. The process started with a welcoming title on the board and slowly evolved in to a living record of what was taking place. The chalkboard served many purposes. Each time a student would solve a problem or received help they would determine if this information was valuable to share with others and if so would write it on the board. Many times, a contribution was small. It might be a key word or a sentence or a diagram, reminders to save or render, or a list of shortcuts to use. The chalkboard also served as an outlet for frustration as hurdles were finally crossed; the key to getting over them was written for others to view. Every participant contributed a discovery they felt was worth sharing. What was written was not to be critiqued but rather to be shared and show studiomates what had been accomplished and identify uncertainties. Through their shared work they were able to track the evolution of the other students' projects and determine what was important. Curiously, the chalkboard became a rallying point, a serendipitous location that brought the group together and strengthened the learning community. As the students were working at all hours the content varied depending on the time of day or night it was added. Each morning the students had a chance to look at the material again and be reminded of what they and others had shared.

For me, the [chalk] board was also a visual reminder that even though I have much more to learn, I did learn a great deal in the short time we were together. So, in a sense, it became a personal tool for reflection. However, the board also evolved over time and became somewhat like a visual scrapbook of meaningful experiences that we shared as a group which was reflective of the team-building experience that IS Emma.

It served as a wonderful reflective tool... powerful and magical.

The board became our commons to express ideas, phrases, frustrations, our learning. The lack of structure let us create our own place as a community and that kept the motivation to add to it alive.

It was a really low tech wiki in the most basic sense. It was a common medium in which we could add, edit, and delete entries. Everyone could contribute. That's what kept us going, wanting to add more, to learn and often to stay sane or keep our spirits high.

# What Was Learned

Based on the data collected throughout the course and the observations of the instructor, the design of the course had a positive impact on the student learning experience by fostering concentrated learning in both the face-to-face and online design studios. It was important to have the initial course meetings to gather and begin to develop identities as video designers. Although some of the students had known each other from other courses, many were meeting for the first time. The early personal encounters made the online sharing more effective. The design studio model proved to be effective for supporting a deep and positive learning experience for students. The students were not just working on similar projects but working in the same physical and virtual spaces. The opportunity to share throughout the course was enhanced by the tight-knit setting of the studio environment sessions. Students were in charge of their own projects, which gave them a high degree of control but they also used the opportunity to benefit from the experiences of others. No one reported negative issues around participation; students saw the course design as an opportunity to work with others and they took advantage of it. A community was started that grew out of a need and a willingness to share and, although maybe not necessarily a community of practice, the connections continued beyond completion of the formal course requirements. Students took advantage of both the online and the face-to-face studio locations to find support. Those who encountered problems shared that they were secure in knowing they could find help from others. The virtual studios did work but the strongest sense of community was created in face-to-face design studios. The frequency of the online interactions could be categorized as regular but not frequent. Hopefully future offerings of the course will address the need for more online interaction. The authentic nature of the assignments connected the participants to projects and content that was relevant in their professional lives. Based on what was learned it can be said that the studio course design helped create a more supportive learning environment than had existed in previous offerings of the course. What helped this particular community was that everyone has something to contribute. Video has many facets such as planning, scripting, voicing, shooting, editing, and sharing. Every student was able to develop expertise in one or more of these areas and felt comfortable sharing their new skills and knowledge with the others. The creation of artifacts was an important component of the course representing student understanding of the concepts. The artifacts were actual objects created for assignments to help students scaffold an understanding of the video production process. In addition, blog posts, scripts, discussions, tweets all became artifacts in the course.

All five of the authentic learning factors came together in the studio environment; especially in the areas of authentic assessment and scaffolding. In the online and face-to-face studios the learners were continually being assessed due to the open nature of the learning and artifacts they created. The process directed them to be regularly self-assessing and to give feedback to their

peers. Scaffolding was inherent in the structure of assignments, and supplemented by the just-intime sharing and mutual support from other learners. The students were engaged in projects where they may have possessed some knowledge but there were many uncertainties. When these uncertainties arose they knew they had their colleagues and their instructor to turn to for support.

The studio at the ELKC was an especially exciting time for the learners. Most students had never experienced an intense, isolated learning environment before this, and truly believed it was the best learning experience in which they had ever participated. Each day the students spent many hours together. The students shared a communal space in a small portable classroom building where they could work without a sense of isolation or working alone. Because of competing professional demands five of the students were unable to attend the studio at the ELKC. This provided a challenge to keep the group together and sharing as a whole. Through the use of email, Twitter and YouTube the studio participants were able to maintain their connections with students unable to attend and keep the community together virtually. The frequency of the social contact, high numbers of tweets and emails were a testament to the use of these online tools to keep the group connected. The social media connections brought a sense of what was happening to those unable to attend including others in the program who were not enrolled in the course. The unexpected artifact of the chalkboard became a powerful part of the face-to-face studio session. It will be interesting to see if the chalkboard experience can be replicated in future offerings of the course, but the important result was a repository of learning artifacts of successes and failures that future learners in the course can emulate and critique.

### Conclusion

The outcomes of the course illustrate that that students were successful when they shared their ideas and creations as a part of a design studio learning environment, and that they learned skills thoroughly by working on authentic projects. The outcome of the experience shows the positive strengths of design studio learning in a concentrated face-to-face situation. The value of the online experiences played an important support role to the more powerful and profound face-to-face interpersonal experiences. There is definitely an opportunity to better integrate the online design studio component to enhance relationships and develop the student experience even further. It is also important to acknowledge the incredibly deep experience at the face-to-face session at ELKC would be difficult to replicate in an entirely online setting. The experience in ETAD 879 created an impact on the entire ETAD program. Strong relationships between students were formed that strengthened their experience in other courses. With an obvious emphasis on changing the course the students began to rethink course design from the perspective of instructional designers. The authentic studio design model has potential to positively impact future video design courses and contributes to our understanding of innovative ways to offer instruction to our students.

# References

- Barrett, T. (2000). Studio critiques of student art: As they are, as they could be with mentoring. *Theory Into Practice*, 39(1), 29 35.
- Brown, J. (2005). New learning environments for the 21st Century. In M. Devlin, (Ed.), *Aspen symposium* (pp. 4.1- 4.53). Retrieved from <a href="http://net.educause.edu/ir/library/pdf/ffp06W.pdf">http://net.educause.edu/ir/library/pdf/ffp06W.pdf</a>
- Brown, J., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning *Educational Researcher*, 18(1), 32–42.
- Candela, L., Dalley, K., & Benzel-Lindley, J. (2006). A case for learning-centered curricula. *The Journal of Nursing Education*, 45(2), 59.
- Cennamo, K., & Brandt, C. (2012). The "right kind of telling": Knowledge building in the academic design studio. *Educational Technology Research and Development*, 60, 839-858.
- Clinton, G., & Rieber L.P. (2005). Creativity, flow, and the training of graduate students in design and development skills. *Instructional Technology Monographs*, 2(2). Retrieved from http://itm.coe.uga.edu/archives/fall2005/gclinton.htm
- Clinton, G., & Rieber L. (2010). The studio experience at the university of Georgia: An example of constructivist learning for adults. *Educational Technology Research and Development*, 58, 755-780.
- DiMartino, J., & Castaneda, A. (2007). Assessing applied skills. *Educational Leadership*, 64(7), 38.
- Greenberg, S. (2009). Embedding a design studio course in a conventional computer science program. In P. Kotzé, W. Wong, & J. Jorge (Eds.) *International Federation for Information Processing, Creativity and HCI, Vol 289, From Experience to Design in Education* (pp. 23-41). Boston: Springer.
- Greening, T. (1998). Scaffolding for success in PBL. *Medical Education Online*, *3*(4), 1–15. Retrieved from http://www.med-ed-online.org
- Gulikers, J. T. M., Bastiaens, T. J., & Kirschner, P. A. (2004). A five-dimensional framework for authentic assessment. *Educational Technology Research and Development*, *52*(3), 67-86.
- Herrington, J., & Oliver, R. (2000). An instructional design framework for authentic learning environments. *Educational Technology, Research and Development, 48*(3), 23 48.
- Hmelo-Silver, C. E., & Barrows, H. S. (2008). Facilitating collaborative knowledge building. *Cognition and Instruction*, 26(1), 48.
- Kowch, E., & Schwier, R. A. (1998). Considerations in the construction of technology-based virtual learning communities. *Canadian Journal of Educational Communication*, 26(1), 1-12.

- Magee, C. M. (2011). A multi-case study of two studio learning environments: Technology enabled active learning (TEAL) at Massachusetts Institute of Technology and a Reggio Emilia studio at school within school (SWS). *INTED2011 Proceedings*, 4067-4076.
- McDermott, R. (1999). On becoming labelled--The story of Adam. In P. Murphy (Ed.), *Learners, learning and assessment* (pp. 1-21). London: Paul Chapman.
- McGuire J., & Banerjee, M. (2008). Human-centered curriculum design studio learning environment (Breakout Session Report). Colleges of the Fenway Teaching and Learning Conference.
- North, C. (2008). What is all this talk about "social justice"? Mapping the terrain of education's latest catchphrase. *Teachers College Record*, 110(6), 1182-1206.
- Norman, D. (1991). Cognitive artifacts. In J. M. Carroll (Ed.), *Designing interaction* (pp. 17 38). New York: Cambridge University Press.
- Reimer, Y., & Douglas, S. (2003). Teaching HCI design with the studio approach. *Computer Science Education*, 13(3), 191-205.
- Savery, J. (2006). Overview of problem-based learning: Definitions and distinctions. *The Interdisciplinary Journal of Problem-based Learning*, *I*(1), 9 20.
- Schwier, R. A. (2011). *Connections: Virtual learning communities*. Saskatoon, SK: Copestone. Retrieved from http://tinyurl.com/ebookflyer
- Sensoy, O., & DiAngelo, R. (2009). Developing social justice literacy: An open letter to our faculty colleagues. *Phi Delta Kappan*, *90*(5), 345-352.
- Stein, S., Isaacs, G., & Andrews, T. (2004). Incorporating authentic learning experiences within a university course. *Studies in Higher Education*, 29(2), 239-258.
- Snyder, J., Heckman, R. & Scialdone, M. (2009). Information studios: Integrating arts-based learning into the education of information professionals. *Journal of the American Society for Information Science and Technology*. 60(9), 1923-1932.
- Tochon, F.V. (2000). When authentic experiences are "enminded" into disciplinary genres: Crossing biographic and situated knowledge. *Learning and Instruction*, 10(4), 331-359.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York, NY: Cambridge University Press.
- Wenger, E. (2007). *Communities of practice. A brief introduction*. Retrieved from <a href="http://www.ewenger.com/theory">http://www.ewenger.com/theory</a>
- Willems, C. (2009). Objectifying the subjective: Assessment and feedback in creative arts studio learning and teaching. In S. Wilson & K. Watson, Karin, (Eds.) *Curriculum development in studio teaching* (pp. 192-198). Sydney, Australia: Australian Learning and Teaching Council.

- Wilson, J. (2010). Authentic Learning at the Lake: An Approach to Graduate Level Video Production. In *Society for Information Technology & Teacher Education International Conference* (Vol. 2010, No. 1, pp. 1221-1228).
- Wilson, J., & Schwier, R. (2009). Authenticity in the process of learning about instructional design. *Canadian Journal of Learning and Technology*, 35(2). Retrieved from http://www.cjlt.ca/index.php/cjlt/article/view/520

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